

Amendments to the Claims

The following listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-30 (Canceled).

31. (Currently amended) A fastening apparatus for use in endoscopic surgery comprising:

a handle portion [[(10)]];

a triggering mechanism [[(30)]] at least partially positioned in the handle;

a plurality of vertically stacked fasteners [[(80)]]; and

a fastener applicator connectable to the handle portion, the fastener applicator including:

a first half-section [[(50)]] and a second half-section [[(100)]], the first half-section includes a flat side [[(54)]] having a recessed region [[(70)]] formed therein, the recessed region being configured and dimensioned to retain the plurality of vertically stacked fasteners arranged in a linear configuration therein and to slidably receive a pusher [[(82)]] therein, the second half-section includes a flat side [[(102)]] having a recessed portion [[(110)]] formed therein, the recessed portion being configured and dimensioned to slidably receive a slide [[(120)]] therein;

a fastener positioning spring [[(60)]] attached to and flush with the recessed region of the first half-section, wherein the fastener positioning spring is biased to extend beyond the recessed region and the flat side of the first half-section; and

a stop spring [[(170)]] housed within the recessed portion of the second half-section, the stop spring being biased such that when unrestrained the stop spring extends beyond the recessed portion of the second half-section and into the recessed region of the first half-section, wherein a distal end of the stop spring engages a fastener adjacent to a distal most fastener.

32. (Currently amended) The apparatus of claim 31, wherein a distal end of the first half-section includes a cut-away region [[(92)]] configured and dimensioned to permit ejection of one of the plurality of fasteners.

33. (Currently amended) The apparatus of claim 32, wherein a distal end of the second half-section is provided with an anvil [[(130)]].

34. (Previously presented) The apparatus of claim 33, wherein the anvil is triangular.

35. (Previously presented) The apparatus of claim 33, wherein the anvil is a cantilever that extends beyond the recessed portion of the second half-section and into the cut-away region of the first half-section.

36. (Currently amended) The apparatus of claim 35, further comprising:

slot regions [(140a, 140b)] formed in the second half-section on either side of the anvil; and

ejector springs [(150a, 150b)] housed within each slot region, wherein a distal end of each ejector spring is biased such that when unrestrained each ejector spring extends beyond the anvil and into the cut-away region of the first half-section.

37. (Currently amended) The apparatus of claim 35, further comprising a slide [(120)] having a distal end shaped to complement the shape of the anvil.

38. (Currently amended) The apparatus of claim 37, wherein the distal end of the slide [(120)] includes a notch.

39. (Currently amended) The apparatus of claim 37, wherein the slide [(120)] includes a slotted region [(200)] which alternately restrains and releases the stop spring by allowing the stop spring to protrude through the slide.

40. (Currently amended) The apparatus of claim 38, wherein the notch of the slide [(120)] has, as its widest width, a distance essentially equal to a width of the slide.

41. (Currently amended) The apparatus of claim 31, wherein a distal end of the recessed region [(70)] of the first half-section [(50)] includes a ramp [(72)] formed near a distal end

thereof to assist a distal-most fastener of the plurality of fasteners to enter the recessed portion of the second half-section [[(100)]].

42. (Currently amended) The apparatus of claim 31, wherein the fastener positioning spring [[(60)]] is configured and adapted to urge the distal-most fastener of the plurality of fasteners from the recessed region [[(70)]] of the first half-section to the recessed portion [[(110)]] of the second half-section when unrestrained.

43. (Currently amended) The apparatus of claim 31, wherein the fastener positioning spring [[(60)]] is configured and adapted to urge the distal-most fastener of the plurality of fasteners from the recessed region [[(70)]] of the first half-section to the recessed portion [[(110)]] of the second half-section when the slide [[(120)]] is positioned proximal of the fastener positioning spring.

44. (Currently amended) The apparatus of claim 31, wherein the stop spring [[(170)]] is configured to retain a fastener adjacent to the distal-most fastener of the plurality of fasteners when in the unrestrained state.

45. (Currently amended) The apparatus of claim 43, wherein the slide [[(120)]] is configured to urge the stop spring [[(170)]] into a restrained state and to distally urge a fastener positioned within the recessed portion of the second half-section when the slide is advanced distally.

46. (Currently amended) The apparatus of claim 35, wherein the slide [[(120)]] is configured to urge the ejector springs [[(150a, 150b)]] into a restrained state and shapes a fastener positioned within the recessed portion of the second half-section when the slide is advanced distally.

47. (Currently amended) The apparatus of claim 46, wherein when the slide is advanced proximally after having urged the fastener distally to be shaped, the ejector springs [[(150a, 150b)]] become unrestrained and urge the shaped fastener off of the anvil.

48. (Currently amended) A fastening apparatus for use in endoscopic surgery comprising:

a handle portion [[(10)]];

a triggering mechanism [[(30)]] at least partially positioned in the handle;

a plurality of vertically stacked fasteners [[(80)]]; and

a fastener applicator connectable to the handle portion, the fastener applicator including:

a slide [[(120)]];

a first half-section [[(50)]] including a surface [[(54)]] having a fastener storage channel [[(70)]] formed therein, wherein the fastener storage channel is configured and dimensioned to retain the plurality of fasteners arranged in a linear configuration below the surface of the first half-section;

a second half-section [[(100)]] including a surface [[(102)]] having a recessed portion [[(110)]] formed therein, wherein the recessed portion being configured and

dimensioned to allow reciprocating slidable movement of the slide therethrough, and an anvil [[(130)]] formed at the distal end of thereof and extending into the recessed portion;

a fastener positioning spring [[(60)]] attached within the fastener storage channel, the fastener positioning spring having a distal end which is biased to extend beyond the fastener storage channel and beyond a prominent-most plane of the surface of the first half-section, wherein the fastener positioning spring is configured to urge a distal-most fastener of the plurality of fasteners from the fastener storage channel to the recessed area channel when the slide is positioned proximally of the distal-most fastener; and

a stop spring [[(170)]] housed within the recessed area of the second half-section, wherein a distal end of the stop spring is biased such that when unrestrained the distal end of the stop spring extends beyond the drive channel, through the slide and into the fastener storage channel of the first half-section, wherein the distal end of the stop spring engages a fastener adjacent to the distal-most fastener.

49. (Previously presented) A fastening apparatus for use in endoscopic surgery comprising:

a handle portion;
a triggering mechanism at least partially positioned in the handle;
a plurality of vertically stacked fasteners; and
a fastener applicator connectable to the handle portion, the fastener applicator including:

a first half-section and a second half-section, the first half-section includes a flat side having a recessed region formed therein, the recessed region being configured and

dimensioned to retain the plurality of vertically stacked fasteners therein and to slidably receive a pusher therein, and a distal end of the first half-section includes a cut-away region configured and dimensioned to permit ejection of one of the plurality of fasteners;

the second half-section includes a flat side having a recessed portion formed therein, the recessed portion being configured and dimensioned to slidably receive a slide therein, and a distal end of the second half-section includes an anvil, wherein the anvil is a cantilever that extends beyond the recessed portion of the second half-section and into the cut-away region of the first half-section;

a fastener positioning spring attached to and flush with the recessed region, wherein the fastener positioning spring is biased to extend beyond the recessed region and the flat side of the first half-section;

a stop spring housed within the recessed portion of the second half-section, wherein the stop spring is biased such that when unrestrained the stop spring extends beyond the recessed portion of the second half-section and into the recessed region of the first half-section; and

a slide having a distal end shaped to complement the shape of the anvil, wherein the slide includes a slotted region which alternately restrains and releases the stop spring by allowing the stop spring to protrude through the slide.

50. (Previously presented) The apparatus of claim 31, wherein a distal end of the stop spring restrains a fastener adjacent to the distal most fastener to inhibit distal advancement thereof.